ABSTRACT OF THE INVENTION POLYMERIZABLE COMPOUNDS AND COMPOSITIONS

An esterified macromonomer within the scope of the general formula:

$$\begin{bmatrix} 0 \\ R_1 \end{bmatrix}_n z = \begin{bmatrix} E \end{bmatrix}_m$$

wherein Z is an organic moiety, R₁ is hydrogen or a substituted or unsubstituted alkyl having from 1 to 12 carbon atoms, oxyalkyl having from 1 to 12 carbon atoms, alkenyl having from 2 to 12 carbon atoms, cycloalkyl having from 5 to 12 carbon atoms, aryl having from 6 to 12 carbon atoms or aralkyl having from 7 to 12 carbon atoms, each E independently is a hydroxyl group, an organic ester moiety or an inorganic ester containing moiety and at least one E is an ester containing moiety, n and m each independently is an integer from 2 to 12. The esterified macromonomer is obtainable by esterification of at least a portion of the -OH groups of a macromonomer having at least one terminal double bond with at least one derivative of an inorganic or organic acid which introduces pendant groups exhibiting at least one acid moiety selected from the group of consisting of -COOH, -PO3H2, -SO₃H, -BO₂H or salts thereof. The number of the acid moieties is chosen such that a polymer obtained by polymerizing those monomers has an adhesive strength to dentine of at least 2 MPa.

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